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## REMARKS

Applicants respectfully request entry of the foregoing and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow.

Claims 10-21 are pending in the application.

By the above amendments, Applicants amended claim 10 to further clarify that the claim is directed to a method of using a composition in an adhesive wherein the composition comprises for successive or simultaneous addition to said adhesive an isocyanate composition (a) and a surfactant (b). Applicants also amended the dependent claims, where appropriate, to make the dependent claims consistent with independent claim 10. Applicants also amended claim 11 to provide units for the recited viscosity to address the §112 issue. A claim that has been amended in a manner that does not narrow the claim's scope should be accorded its full range of equivalents.

Applicants thank the Examiner for acknowledging Applicants' request for continued examination under 37 C.F.R. §1.114, for withdrawing the finality of the previous Official Action and for entering Applicants' submission filed on May 12, 2008.

Turning now to the Official Action, claim 11 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite. For at least the reasons that follow, withdrawal of the rejection is in order.

In order to obviate the rejection, Applicants amended claim 11 to include units for the recited viscosity. Support for this amendment can be generally found in the specification.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the §112, second paragraph, rejection of claim 11.

Claims 10-21 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nabavi (WO97/31960, which the Official Action asserts is equivalent to U.S. Patent Application Publication No. U.S. 2003/0158328). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent claim 10, as amended above, recites a method of <u>using a composition in an adhesive</u>, said composition comprising, for <u>successive or simultaneous addition</u> to said adhesive,

an isocyanate composition a) with a mass content of N=C=O function of between 10% and 30%, and with a viscosity of not more than 2500 mPa.s, and

<u>a surfactant b)</u> comprising a compound or a mixture of compounds of mean general formula:

$$(0)_{m_{(X)}} (0)_{s 0}^{R_2} (1)_{q}$$

$$(-0)_{p}^{P} \times (0)_{n0}^{R_1}$$

wherein:

p represents a value between 1 and 2 (closed intervals, i.e., comprising the limits);

m represents zero or 1;

the sum p+m+q is equal to 3;

the sum 1+p+2m+q is equal to 3 or 5;

X is an oxygen;

X' is an oxygen;

n and s have the same statistical value, chosen between 5 and 30, wherein  $R_1$  and  $R_2$ , which are identical, are chosen from aryl radicals, and  $R_1$  and  $R_2$  represent an alkylaryl of 10 to 20 carbon atoms. (Emphasis added.)

Independent claim 18 defines an <u>adhesive composition</u>, comprising:

<u>an isocyanate composition a)</u> with a mass content of N=C=O function of between

10% and 30% and with a viscosity of not more than 2500 mPa.s;

<u>a surfactant b)</u> comprising 50% by mass of a compound or mixture of compounds of general formula:

wherein:

p represents an integer between 1 and 2;

m represents 0 or 1;

the sum p+m+q is equal to 3;

the sum 1+p+2m+q is equal to 3 or 5;

X is an oxygen;

X' is an oxygen;

n and s, which are identical or different, represent an integer chosen between 5 and 30, wherein  $R_1$  and  $R_2$ , which are identical, are chosen from any radicals,

R<sub>1</sub> and R<sub>2</sub> represent an alkylaryl of 10 to 20 carbon atoms; and an aqueous phase with a pH of between 4 and 9. (Emphasis added.)

It is well-established that in order to demonstrate anticipation under §102, each feature of the claim at issue must be found, either expressly described or under principles of inherency in a single prior art reference. See, Kalman v. Kimberly-Clark Corp., 218 USPQ 798 (Fed. Cir. 1983). That is not the case here.

Nabavi relates to isocyanate-based compounds and compositions. It also relates to their process for utilization, their utilization for producing coating and coatings thus obtained. (See, Nabavi at column 1, paragraph [0001].) In particular, Nabavi is directed to compositions for use in paints and varnishes. (See, Nabavi at column 1, paragraph [0005].)

Although the Official Action has maintained its position that the claims are anticipated by Nabavi, Applicants again urge the Examiner to consider Applicants' following remarks. Applicants continue to believe that the pending claims directed to a method of using a composition in an adhesive and an adhesive composition (making use of emulsifiable isocyanates comprising isocyanate and surfactant) are clearly distinguished from Nabavi, which is directed to compositions based on isocyanate comprising compounds having anionic functions and a fragment of polyethylene glycol. Again, Applicants believe that is not an insignificant difference that the compositions of Nabavi are paints and/or varnish compositions; not adhesive compositions. (See, Nabavi at column 1, paragraphs [0005], [0010] and [0011].) (Also see, Nabavi at page 10, Examples 10-12, which discuss industrial paint compositions.) Nowhere does Nabavi disclose or suggest a method of using a composition in an adhesive or an adhesive composition, as claimed in independent claims 10 and 18, respectively.

To further support Applicants' position that Nabavi cannot anticipate the

subject matter of the pending claims (because of the understood difference between the coatings of Nabavi and the method and adhesive composition claimed), Applicants have provided the attached definitions from the Coatings Encyclopedic <u>Dictionary</u>. Applicants submit that the paint and varnish compositions of Nabavi would be understood by those of ordinary skill in the art to be coatings, which are completely different from adhesives. Just because a coating can adhere to a substrate does not mean that the coating is an adhesive. For example, the attached definitions from the Coatings Encyclopedic Dictionary define "coating" to mean paints, lacquers, enamels, printing inks, etc., or a liquid, liquefiable or mastic composition which is converted to a solid protective, decorative, or functional adherent film after application as a thin layer." (Emphasis added.) In contrast, "adhesive" is defined as a substance capable of holding materials together by surface attachment. (Emphasis added.) Notably, the definition provided for "adhesive" further states that "adhesive" is a general term including cement, glue, mucilage and paste, but is not described to include coatings or more specifically, paints and varnishes like those described in Nabavi. The aim of a coating is to bring protective, decorative or functional properties (as provided in the attached definition), which is substantially different from an adhesive, which is designed to join two materials together. Applicants further submit that a coating composition will not have the same properties as an adhesive when used as a coating (i.e., when deposited as a thin layer on a support or when used between two supports to be joined). For example, the drying properties of the coating composition will not be the same as an adhesive.

Furthermore, Applicants continue to submit that one of ordinary skill in the art

would not have been motivated by Nabavi to use the isocyanate paint or varnish compositions (i.e., coating compositions) of Nabavi as adhesive compositions because the properties of paint and varnish compositions (e.g., gloss, chemical resistance, and hardness (discussed at Examples 10-12 of Nabavi)) are totally different from the properties of adhesive compositions (e.g., breaking strength and peeling (discussed on pages 26 and 28 of the instant application)). Again, this lack of motivation is consistent with the understood meaning of the terms "coating" and "adhesive," as defined in the <u>Coatings Encyclopedic Dictionary</u>.

Accordingly, Applicants submit that Nabavi does not anticipate the method defined in independent claim 10 or the adhesive composition defined in claim 18 because Nabavi does not disclose or fairly suggest a method of using a composition in an adhesive or an adhesive composition. Instead, Nabavi is directed to processes for preparing coating compositions (i.e., paint and varnish compositions) and the resulting coating compositions (i.e., paint and varnish compositions).

Further, in evaluating the patentability of the independent claims, Applicants continue to submit that the elements recited in the preamble of the independent claims should be considered. Applicants continue to submit that the elements in the preamble cannot be ignored under applicable legal precedent because they further distinguish the claimed method and composition from Nabavi. The preambles of these claims help to demonstrate that the claimed method and composition are different from those disclosed or suggested in Nabavi (i.e., directed to coating compositions (paint and varnish) having properties such as gloss, chemical resistance and hardness as opposed to adhesive compositions that exhibit breaking strength and peeling).

It has been established that when the preamble gives life and meaning to the claimed subject matter, then the elements do limit the scope of the claim. (See, Loctit Corp. v. Ultraseal, Ltd., 781 F.2d at 866, 288 USPQ at 92; Perkin-Elmer Corp. v. The Computer Vision Corp., 732 F.2d 888, 896, 221 USPQ 669, 675 (Fed. Cir. 1984).) Furthermore, courts have found claim preambles to be "limiting when the introductory phase was deemed essential to point out the invention defined by the claim...." (See, Kropa v. Robie, 187 F.2d 888, 150 USPQ 478, 481 (CCPA 1951).)

Applicants submit that because the phrases used in the preambles of the above independent claims define the claimed method and composition as a method of using a composition in an adhesive and an adhesive composition, Applicants submit that the preambles of the claims point out the invention defined therein and, thus, give life and meaning to the claimed subject matter.

Moreover, courts have held that the preamble of the claim is limiting when the claim expressly incorporates language of the preamble into the body of the claim (see, for example, CFMT, Inc. v. Yeldup Int'l Court, 92 F. Supp.2d 359 (D. Del. 2000).) For example, in the present application, independent claim 10 defines a method of using a composition in an adhesive and then states that said composition comprises elements for successive or simultaneous addition to said adhesive. Accordingly, the preamble of claim 10 states that the method is for using a composition in an adhesive and the body of the claim recites that the composition comprises elements for successive or simultaneous addition to said adhesive. Thus, while the preambles of the independent claims already breathe life and meaning into the body of the claims, the bodies of the claims refer back to elements recited in the preambles. Accordingly, Applicants submit that the preamble language of these

claims cannot be ignored under applicable legal precedent for at least this additional

reason.

For at least these reasons, Applicants respectfully submit that claims 10 and

18 are patentable over Nabavi. The remaining claims (claims 11-17 and 19-21)

depend, directly or indirectly, from these independent claims, and are, therefore, also

patentable over Nabavi for at least the reasons that claim 10 and 18 are patentable.

From the foregoing, Applicants earnestly solicit further and favorable action in

the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general,

Applicants invite the Examiner to telephone the undersigned at the Examiner's

By:

earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: October 9, 2008

Martin A. Bruehs

Registration No. 45635

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620

Attachment: Coatings Encyclopedic Dictionary, definitions of "coating" and

"adhesive" (1995).



## Coatings Encyclopedic Dictionary

Edited by
Stanley LeSota

Published by Federation of Societies for Coatings Technology 492 Norristown Road, Blue Bell, PA 19422-2350





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Carefoxy coating coating in which amous or mideling combination of COAL TAR with EPOXY

hydricarbons Aromatic hydrocarbons GENTOM: COAL TAK, including BENZENE, TOLU-

EDUCATION residue from COAL TAR. 76 does considerably from a very soft to a very modilist: Fusion points vary from as low as fall fit as high as 232°C (450°F).

BL 193119 SEC COUMARONE-INDENE RESINS, LGT

wiething coating in which myper reactive combination of COAL TAR with a POLY-DOWN BEON!

scence the formation of a film of resinous or procine material when water evaporates from mulsion or latex system, permitting contact iking of adjacent latex particles. Action of Dining of particles into a film as the volatile (DAC)

Method D3793 covers the coales-

Asplijer paints.

Reconficulescing agent) solvent with a high than polar which, when added to a coating aids than polar which via temporary PLASTICIZATION STRUME of the vehicle. 55,82,164

grains wood with wide and conspicuous anprints having considerable difference between in the contract of the contract

missometimes used to designate wood thise pores; such as oak, ash, chestnut, and ing but in this sense the term "coarse texall more often used.

COARSE GRAIN. 158

Table varush, or LACQUER applied to a surface as discributed film when dry.54,55

depating system usually consists of a numof coats separately applied in a predetermined ut at suitable intervals to allow for DRYING OF L'is possible with certain types of matean build up coating systems of adequate THICKand orderry by a more or less continuous proof amissition. e.g., wer-on-wer spraying. In soat in the above sense.

abinsive a reconstrype backing upon which PASIVE CRAINS. 19

The hicking may be paper, cloth, vulcanized or a combination of these materials. Varidypics of resin and hide GLUES are used as adves. The abrasives used are flint, emery, crogathet, uluminum oxide, and silicon carbide.

coated paper a paper coated with CLAY, other white pigments, and a suitable binder. 168

coater apparatus which applies paint. 59,70

coating (1) generic term for paints, LACQUERS, ENAM-Els, province ines, etc;  $^{n}$  (2) a liquid, liquefiable or mastic composition which is converted to a solid protective, decorative, or functional adherent film after APPLICATION as a thin layer. It is also used to refer to films applied to PAPER, PLASTICS, OF FOILS. 71 (ASTM) See PRISH, 54.71

coating, dip see DIP COATING.77

Coatings Industry Education Foundation (CIEF) Foundation which has as its goal to advance, through education and research, the chemical, physical, and mathematical sciences relating to the technology of protective coatings, and to aid in the dissemination of the results of such research and education to the public, through scientific publications and lectures. The Board of Directors of the Federation of Societies for Coatings Tech-NOLOGY constitute the stockholders or members of the CIEP. It is the duty of the Trustees to manage the business affairs of CIEF, including allocating funds for educational purposes. 174

coating powders (1) finely divided, solid PLASTIC materials which are heat fusible and form relatively smooth, tough, electrical insulating coatings upon APPLICATION to METAL SURfaces; 71 [ASTM] (2) finely divided particles of ORCANIC POLYMER, either THERMOPLASTIC OF THERMOSETTING, Which generally contain pigments, paless, and addrives and which remain finely divided during storage under suitable conditions. 71 (ASTM) See POWDER COAT-INCS. 71,77

coating solids the part of the coating which remains after the coating is DRIED or CURED. 128 (EPA) See Solids, Nonvolatile Matter, Solids by Yolume, and Solids by Weight. 125

coating, spray the process in which a substrare is sprayed with the coating material." (ASTM)

coating system see COAT.54

COSTINGS TEMOVEL SCC PAINT and VARNISH RE-MOVER, 158,164

Coatings Societics International (CSI) an international organization of coatings technical associations whose purpose is the advancement of international relations and technical communications. Member organizations include FEDERATION D'Association des Technicians des Peintures,

Worth presented in CAP/DALL CAPS type indicate that the word in defined in another part of the Continua Encyclopedic Dictionary. Numerical superscripts classify terms in one or more of the categactes listed in the second section of this volume.

additive color mixture

8

additive color mixture color which results when the same area of the retins of the eye is information water by lights of different spectral distribution, such as by two or more colored lights. 43.69

Additive color mixture may result from addition of lights from two or more projectors, by visual averaging of small colored dots as on colored television screens, by visual averaging of spinning or flickering colors, or by different stimulation of each of the two retinas of a single observer (binocular fusion). Should be distinguished from sumtractive colorant (rigment of dyestup) MIXTURE.

additive reaction chemical reaction in which two components join together to form a single reaction product, 123,134

In a pure additive reaction, neither of the RE-ACTANTS undergoes MOLECULAR fission or splitting, but attaches itself to the other reactant intact. In other additive reactions, one of the reactants may split into two separate parts, each of which attaches itself to the appropriate places of the other intact reactant. There is still, however, a single reaction product.

adduct a CHEMICAL addition product, such as the cyclic product of the addition of a diene with another unsaturated COMPOUND (as MALEIC ANHY-DRIDE). 124

adduct curing agent see crossinging ACENT. 67,52,74

adeps lanae, anhydrous pharmaceutical name for LANOLIN or purified wood GREASE, 144,137

adhere to cause two surfaces to be held together by ADHRSION. P (ASTM)

adherend body which is held to another body by an ADHESIVE, 79

adherometer instrument which measures the sorce required to strip a coating from a metal surface. 145,79

adhesion state in which two surfaces are held regether by interfacial forces which may consist of valence forces or interlocking action, or both.<sup>79</sup> (ASTM)

ASTM test methods for adhesion include: cut tape test. D3359; Dillon dynometer test. D4796; HIPAC coatings, D3730, portable tester, pull-off strength. D4541; prepainted fabricated metal, D4145; scrape test on smooth surfaces, D2197; traffic marking paints, materials. D4796; zinc-tich primer on steel. D4146.

adhesion, mechanical Adhesion between surfaces in which the Adhesiva holds the parts together by interlocking action. (ASTM) See Adhesion, specific. (ASTM)

adhesion promoters materials built into the ender

or added to the paint to form primary bonds to either the substrate or the previously applied coating with the specific aim of improving the dry or wet adhesion, or both [7,23] [ASTM]

adhesion, specific Adhesion between surfaces which are held together by valence forces of the same type as those which give rise to cohesion. The See also Adhesion, MECHANICAL TO THE SECOND TO THE SECOND THE SECOND TO THE SECOND TH

adhesive substance capable of holding materials together by surface attachment." (ASTM)

Adhesive is the general term and includes among others cement, glue, muchace, and pasts. All of these terms are loosely used interchangeably. Various descriptive adjectives are applied to the term. "adhesive," to indicate certain characteristics as follows: physical form—liquid adhesive, tape adhesive; chemical type—silicate adhesive, resin adhesive; materials bonded—paper adhesive, metal-plastic adhesive, can label adhesive; and conditions of use—hot-setting adhesive; sive.

adhesive, assembly ADHESIVE which can be used for bonding parts together, such as in the manufacture of a boat, airplane, furniture, and the like. 79.57.115 (ASTM)

The term, "assembly adhesive," is commonly used in the woov industry to distinguish such adhesives (formerly called "joint ctues") from those used in making piwood (sometimes called "vēneed in making piwood (sometimes called "vēneed in fabricating finished structures or goods, or subassemblies thereof, as differentiated from adhesives used in the production of sheet materials for sale as such, for example, plywood or laminates.

adhesive, cold-setting ADHESIVE which sets at temperatures below 20°C.79 (ASTM) of ADHESIVE, HOT-SETTING 79

adhesive dispersion two-phase adhesive system in which one phase is suspended in a liquid.79

adhesive, edge jointing ADHESIVE used to BOND strips of VENERE together by their edges in the formation of larger sheets. 57,79

adhesive film SYNTHETIC RESIN ADHESIVE, usually of the THERMOSETTING type, in the form of a thin dry film of resin, used under heat and pressure as an interleaf in the production of laminated materials (particularly purwoup and densified wood). 57.79

adhesive, hot-serting ADHESIVE which requires a temperature at or above 100°C to set it. 7 [ASTM] cf. ADHESIVE, COLD-SETTINE!79

adhesive, pressure sensitive ADHESIVE made so as to adhere to a surface at room temperature by briefly applied reassure alone." (ASTM)

adhesive tape test see TAPE TEST. 157

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